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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,657	BERWANGER ET AL.	
	Examiner	Art Unit	
	Alex Skripnikov	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *1-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed December 4, 2008 have been fully considered but they are not persuasive. Examiner respectfully disagrees Applicants arguments on page 10, lines 8-10, *"Accordingly, as Weigl et al. lacks the inclusion of an additional cycle data or an independent cycle counter being integrated therewith, the invention cannot be anticipated as required under 35 USC 102.", page 10, lines 16-17, "Stoneking et al. is relied upon for disclosing the elements lacking in Weigl et al with respect to claims 16-19 and 24-41.",* because Weigl et al. (column 6, lines 19-41) discloses the **message object, i.e., the message**, corresponds to the message object of the bus, particularly in CAN, and includes the identifier, as well as the data itself. In TTCAN**, the message object is supplemented by at least one, preferably by all three, of the following entries in the transmission matrix: timing window, base mark, rate of repetition.** The timing window is the position in the base cycle. The base mark indicates in which base cycle overall cycle the message is sent first. The rate of repetition defines after how many base cycles this transmission is repeated. Therefore, timing window, base mark, rate of repetition are all cycle data or data about the cycle. Stoneking et al. discloses message arbitration based on the identifier, where additional fields are integrated with identifier. Therefore it would been obvious to perform message arbitration based on timing window, base mark, and/or rate of repetition in the identifier.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims **20-31** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 20 recites: "**in each message, data about the cycle are stored in memory**, wherein either **additional cycle data is integrated with** the identifier, or **an independent cycle counter**. The specification does not describe "**independent cycle counter includes additional cycle data**". The Specification ([0049]) describes, a separate cycle counter **without** teachings that **cycle counter includes additional cycle data** "*For realizing the present invention, it must be possible--as already described above--to distinguish the various cycles from one another. To that end,* ***either an additional cycle datum MUX, integrated with the identifier ID of the messages Ni (see FIG. 3a)****, or* ***a separate cycle counter (see FIG. 3b) can be used****. For transmitting one cycle counter in one message Ni, at least one of the data bytes (=8 bits) can for instance be used. The cycle counter is an independent counter, which is incremented (or decremented) after every cycle and which must be polled separately from time to time.*"

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims **13-19** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 13 recites: "wherein **the identifier has** either additional cycle data integrated therewith, or **an independent cycle counter**". The claim language "**the identifier has an independent cycle counter**" is unclear, because the claim language does not define the "matter", the cycle counter is being independent from. The claim language "**the identifier has** additional cycle data integrated therewith" is interpreted, as "the identifier includes additional cycle data". The claim language "**the identifier has an independent cycle counter**" can not be constructed as the cycle counter independent from the identifier, because the identifier **has** an independent cycle counter.

6. Claims **13-19** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites: "**each message additionally includes data about the cycle**, wherein **the identifier has** either **additional cycle data** integrated therewith, or **an independent cycle counter**". It is unclear, whether the claim language "**additional cycle data**" in the identifier is in addition to already existing "**data about the cycle**" in the message, or the "**additional cycle data**" and "**data about the cycle**" are both referred to the same data.

7. Claims **20-31** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 recites: "in each message, **data about the cycle are stored in memory**, wherein either **additional cycle data** is integrated with the identifier, or an independent cycle counter". It is unclear, whether the claim language "**additional cycle data**" in the identifier is in addition to already existing "**data about the cycle**" in the message, or the "**additional cycle data**" and "**data about the cycle**" are both referred to the same data.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims **13-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weigl et al. **US 6,842,808, as a Pre-Grant Publication US 2001/0018720**, published on August 30, 2001, of record, in view of **Stoneking et al. US 6,606,670**, of record.

As to claim 13:

Weigl et al. discloses a cycle-based communication system for transmitting useful data between users of the system, including a data bus and the users connected to it (Weigl et al.; column 1, lines 44-48), in which the data transmission is effected within cyclically repeating timeframes (first or base cycles; Weigl et al.; column 2, lines

24-35, line 56-57; Fig 4, BZOa-BZ7a) with at least two timeslots (timing windows) each (Weigl et al.; column 3, lines 20-22; illustrated as timing window on Fig. 2), and each timeslot is intended for transmitting one message (one periodic message Weigl et al.; column 3, lines 22-24), one message contains at least some of the useful data (data; Weigl et al.; column 6, lines 28-30), and each message is assigned an identifier (identifier; Weigl et al.; column 6, lines 28-30), characterized in that the identifier is stored in each message as part of the message (message includes identifier; Weigl et al.; column 6, lines 28-30); that each message additionally includes (supplemented; Weigl et al.; column 6, lines 28-33) data about the cycle (rate of repetition; Weigl et al.; column 6, lines 28-40, defines after how many base cycles this transmission is repeated); that the timeslots have a fixed length (specifiable length of timing windows; Weigl et al.; column 5, lines 6-9; timing windows are also illustrated fixed on Fig. 2); and that at least one of the timeslots of one timeframe can be used, in various cycles, for offset transmission of different messages that are not intended for transmission in every cycle (Weigl et al.; column 6, lines 19-27; illustrated on Fig. 4 in timing window ZF5a, different messages (B,C) are transmitted offset (not transmitted in every cycle)).

Furthermore, Weigl et al. discloses additional cycle data (message is supplemented by base mark; column 6, lines 28-41; Weigl et al., where base mark indicates in which base cycle in the overall cycle the message is sent first).

Weigl et al. fails to teach identifier is integrated with additional cycle data.

However, Stoneking et al. discloses that any convenient fields and message format may be used depending on the particular implementation contemplated

(Stoneking et al.; column 5, lines 6-8). Stoneking et al. discloses that message identifier used together with other field (RTR bit) for the purpose of message arbitration. (Stoneking et al.; column 5, lines 15-28; Arbitration Field (identifier associated with other fields) (154) is illustrated on Fig. 2A, 2B).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to access identifier field and supplemented base mark field described by Weigl et al. in a combination, as taught by Stoneking et al. in order to conveniently arbitrate messages (Stoneking et al.; column 5, lines 15-28).

As to claim 20:

A method for transmitting useful data in a cycle-based communication system between users of the system via a data bus, to which the users are connected (Weigl et al.; column 1, lines 44-48), in which the useful data are transmitted within cyclically repeating timeframes (first or base cycles; Weigl et al.; column 2, lines 24-35, line 56-57; Fig 4, BZOa-BZ7a) each with at least two timeslots (timing windows; Weigl et al.; column 3, lines 20-22; illustrated as timing window on Fig. 2), and in each timeslot one message (one periodic message Weigl et al.; column 3, lines 22-24) is transmitted, at least some of the useful data (data; Weigl et al.; column 6, lines 28-30) are stored in memory in a message, and each message is assigned an identifier (identifier; Weigl et al.; column 6, lines 28-30), wherein the messages are transmitted in timeslots of fixed length (specifiable length of timing windows; Weigl et al.; column 5, lines 6-9; timing windows are also illustrated fixed on Fig. 2); that the identifier is stored in memory in the message (message includes identifier; Weigl et al.; column 6, lines 28-30) as part of the

message; that in each message, data about the cycle (rate of repetition; Weigl et al.; column 6, lines 28-40, defines after how many base cycles this transmission is repeated) are stored (supplemented; Weigl et al.; column 6, lines 28-33) in memory; that in at least one of the timeslots of a timeframe, different messages are transmitted offset from one another in various cycles, and in the at least one timeslot, those messages that are not intended for transmission in every cycle are transmitted offset from one another (Weigl et al.; column 6, lines 19-27; illustrated on Fig. 4 in timing window ZF5a, different messages (B,C) are transmitted offset (not transmitted in every cycle)),

Furthermore, Weigl et al. discloses additional cycle data (message is supplemented by base mark; column 6, lines 28-41; Weigl et al., where base mark indicates in which base cycle in the overall cycle the message is sent first).

Weigl et al. fails to teach identifier is integrated with additional cycle data.

However, Stoneking et al. discloses that any convenient fields and message format may be used depending on the particular implementation contemplated (Stoneking et al.; column 5, lines 6-8). Stoneking et al. discloses that message identifier used together with other field (RTR bit) for the purpose of message arbitration. (Stoneking et al.; column 5, lines 15-28; Arbitration Field (identifier associated with other fields) (154) is illustrated on Fig. 2A, 2B).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to access identifier field and supplemented

base mark field described by Weigl et al. in a combination, as taught by Stoneking et al. in order to conveniently arbitrate messages (Stoneking et al.; column 5, lines 15-28).

As to claim 21:

Weigl et al. and Stoneking et al. disclose the claimed invention as to claim 20 above.

Furthermore, Weigl et al. discloses that the users of the communication system are each allocated at least one predeterminable timeslot of the timeframes (component of transmission matrix) for data transmission. (Weigl et al.; column 6, lines 1-4; transmission groups also illustrated on Fig.4).

As to claims 14, 15, 22 and 23:

Weigl et al. and Stoneking et al. disclose the claimed invention as to claims 13, 20 and 21 above.

Furthermore, Weigl et al. discloses that the message includes data about the cycle (rate of repetition (defines after how many cycles this (current) transmission is repeated)) (Weigl et al.; column 6, lines 28-42; therefore, data about the cycle pertain to the message and therefore pertain to the current cycle in which the message is sent and include an ordinal number of the cycle (base mark indicates in which base cycle in the overall cycle the message is sent first)).

As to claims 16-19:

Weigl et al. and Stoneking et al. disclose the claimed invention as to claims 13-15 above.

Furthermore, Weigl et al. discloses the message includes the time data (timing window) which include data about the chronological position of a timeslot within a timeframe (Weigl et al.; column 6, lines 28-37).

Weigl et al. fails to teach that time data can be learned from the identifier; that cycle data are stored in memory in a message as part of the identifier of that message.

However, Stoneking et al. discloses that any convenient fields and message format may be used depending on the particular implementation contemplated (Stoneking et al.; column 5, lines 6-8). Stoneking et al. discloses that message identifier used together with other field (RTR bit) for the purpose of message arbitration. (Stoneking et al.; column 5, lines 15-28; Arbitration Field (identifier associated with other fields) (154) is shown on Fig. 2A, 2B).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to access identifier field and supplemented (timing window or (base mark and rate of repetition)) fields described by Weigl et al. in a combination thereof described by Stoneking et al. in order to arbitrate messages (Stoneking et al.; column 5, lines 15-28).

Furthermore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to retrieve the time data from the identifier combined with the timing window field for the purpose of message arbitration (Stoneking et al.; column 5, lines 15-28).

As to claims 24-31:

Weigl et al. and Stoneking et al. disclose the claimed invention as to claims 22 and 23 above.

Furthermore, Weigl et al. discloses the current cycle data are monitored by the users (reference message received by all nodes and include number of instantaneous cycle (Weigl et al.; column 4, lines 23-30)); predeterminable value stored in a memory of the user for the cycle data (watchdog Weigl et al.; column 4, lines 44-49); a message is sent by a user in a predeterminable timeslot only if the current cycle data match a predeterminable value, stored in a memory of the user, for the cycle data (watchdog is actuated Weigl et al.; column 4, lines 61-65).

Weidl et al. fails to teach that the messages (data traffic) are observed by the users of the communication system; that the identifiers and the cycle data of the messages are compared with predeterminable values, stored in memories of the observing users, for the identifier and the cycle data, and at least the useful data of a transmitted message are received by the user only if the identifier and the cycle data of the message match the predeterminable values, stored in the memory of the user, for the identifier and the cycle data.

However, Stoneking et al. discloses that each message includes a message ID; In order to determine whether to process a received message, each node examines the message ID from the message; each node is configured to process messages whose message IDs meet predetermined criteria; these criteria may be, for example, that the message ID is one in a defined set, is within a certain numeric range or outside of a certain numeric range; If the extracted message ID meets the predetermined criteria,

then the receiving node processes the message (Stoneking et al. column 4, lines 50-58); if a particular node receives a message with a message ID that it is not configured to process, it will not process the message. If, however, a node receives a message with a message ID that it is configured to process, the node will process the message (Stoneking et al. column 7, lines 28-38); the device 400 (Stoneking et al.; Fig 5.) may include receive buffers, at least one acceptance mask and at least one filter; the mask defines a bit pattern associated with a message ID that either should be accepted or rejected; the mask bits are applied to filters which then perform the function of accepting or rejecting an incoming message-based on whether the message ID of the message meets a predetermined criteria defined by the mask (Stoneking et al.; column 10, lines 54-62); in a message-based network, messages are transmitted to all nodes in the network; each node must then determine whether to accept and process a message or ignore the message (Stoneking et al. column 1, lines 24-27) for the purpose of allowing coordinated control of many control nodes within the system (Stoneking et al. column 1, lines 29-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to update method of exchange of data described by Weidl et al. such that to update nodes to process only those messages which are configured to process (meet predetermined criteria) and include an acceptance mask to the nodes described by Stoneking et al. in order to allow coordinated control of many control nodes within the system (Stoneking et al. column 1, lines 29-31).

10. Claims **13-15 and 20-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicants Admitted Prior Art (page 13, [0046])** in view of **Weigl et al. US 6,842,808, as a Pre-Grant Publication US 2001/0018720**, published on August 30, 2001, of record.

As to claim 13:

AAPA discloses an independent cycle counter identifier (MUX bit) (AAPA; [0046] In the prior art, the messages Ni have a so-called multiplex bit (MUX bit), as a result of which it is possible to distribute messages over two cycles. The MUX bit is switched by the application in the context of which a message is transmitted over two cycles. When the first part of a relatively large message is transmitted, for instance, the MUX is switched by the application to 0, and when the second part of the message is transmitted, it is set to 1. In the prior art, there is no connection between the current cycle zy and the MUX bit) (page 13, [0046]).

AAPA fails to teach a cycle-based communication system for transmitting useful data between users of the system, including a data bus and the users connected to it, in which the data transmission is effected within cyclically repeating timeframes with at least two timeslots each, and each timeslot is intended for transmitting one message, one message contains at least some of the useful data, and each message is assigned an identifier, characterized in that the identifier is stored in each message as part of the message; that each message additionally includes data about the cycle; that the timeslots have a fixed length; and that at least one of the timeslots of one timeframe can

be used, in various cycles, for offset transmission of different messages that are not intended for transmission in every cycle.

However, Weigl et al. discloses a cycle-based communication system for transmitting useful data between users of the system, including a data bus and the users connected to it (Weigl et al.; column 1, lines 44-48), in which the data transmission is effected within cyclically repeating timeframes (first or base cycles; Weigl et al.; column 2, lines 24-35, line 56-57; Fig 4, BZOa-BZ7a) with at least two timeslots (timing windows) each (Weigl et al.; column 3, lines 20-22; illustrated as timing window on Fig. 2), and each timeslot is intended for transmitting one message (one periodic message Weigl et al.; column 3, lines 22-24), one message contains at least some of the useful data (data; Weigl et al.; column 6, lines 28-30), and each message is assigned an identifier (identifier; Weigl et al.; column 6, lines 28-30), characterized in that the identifier is stored in each message as part of the message (message includes identifier; Weigl et al.; column 6, lines 28-30); that each message additionally includes (supplemented; Weigl et al.; column 6, lines 28-33) data about the cycle (rate of repetition; Weigl et al.; column 6, lines 28-40, defines after how many base cycles this transmission is repeated); that the timeslots have a fixed length (specifiable length of timing windows; Weigl et al.; column 5, lines 6-9; timing windows are also illustrated fixed on Fig. 2); and that at least one of the timeslots of one timeframe can be used, in various cycles, for offset transmission of different messages that are not intended for transmission in every cycle (Weigl et al.; column 6, lines 19-27; illustrated on Fig. 4 in

timing window ZF5a, different messages (B,C) are transmitted offset (not transmitted in every cycle)).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to transmit messages described by AAPA, in the cycle-based communications system as taught by Weigl et al. in order to allow exchange between users connected by a bus system (Weigl et al.; Title).

As to claim 20:

AAPA discloses an independent cycle counter identifier (MUX bit) (AAPA; [0046] In the prior art, the messages Ni have a so-called multiplex bit (MUX bit), as a result of which it is possible to distribute messages over two cycles. The MUX bit is switched by the application in the context of which a message is transmitted over two cycles. When the first part of a relatively large message is transmitted, for instance, the MUX is switched by the application to 0, and when the second part of the message is transmitted, it is set to 1. In the prior art, there is no connection between the current cycle zy and the MUX bit) (page 13, [0046]).

AAPA fails to teach a method for transmitting useful data in a cycle-based communication system between users of the system via a data bus, to which the users are connected, in which the useful data are transmitted within cyclically repeating timeframes each with at least two timeslots, and in each timeslot one message is transmitted, at least some of the useful data are stored in memory in a message, and each message is assigned an identifier, wherein the messages are transmitted in timeslots of fLxed length; that the identifier is stored in memory in the message as part

of the message; that in each message, data about the cycle are stored in memory; that in at least one of the timeslots of a timeframe, different messages are transmitted offset from one another in various cycles, and in the at least one timeslot, those messages that are not intended for transmission in every cycle are transmitted offset from one another.

However, Weigl et al. discloses a method for transmitting useful data in a cycle-based communication system between users of the system via a data bus, to which the users are connected (Weigl et al.; column 1, lines 44-48), in which the useful data are transmitted within cyclically repeating timeframes (first or base cycles; Weigl et al.; column 2, lines 24-35, line 56-57; Fig 4, BZOa-BZ7a) each with at least two timeslots (timing windows; Weigl et al.; column 3, lines 20-22; illustrated as timing window on Fig. 2), and in each timeslot one message (one periodic message Weigl et al.; column 3, lines 22-24) is transmitted, at least some of the useful data (data; Weigl et al.; column 6, lines 28-30) are stored in memory in a message, and each message is assigned an identifier (identifier; Weigl et al.; column 6, lines 28-30), wherein the messages are transmitted in timeslots of fixed length (specifiable length of timing windows; Weigl et al.; column 5, lines 6-9; timing windows are also illustrated fixed on Fig. 2); that the identifier is stored in memory in the message (message includes identifier; Weigl et al.; column 6, lines 28-30) as part of the message; that in each message, data about the cycle (rate of repetition; Weigl et al.; column 6, lines 28-40, defines after how many base cycles this transmission is repeated) are stored (supplemented; Weigl et al.; column 6, lines 28-33) in memory; that in at least one of the timeslots of a timeframe,

different messages are transmitted offset from one another in various cycles, and in the at least one timeslot, those messages that are not intended for transmission in every cycle are transmitted offset from one another (Weigl et al.; column 6, lines 19-27; illustrated on Fig. 4 in timing window ZF5a, different messages (B,C) are transmitted offset (not transmitted in every cycle)),

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to transmit messages described by AAPA, in the cycle-based communications system as taught by Weigl et al. in order to allow exchange between users connected by a bus system (Weigl et al.; Title).

As to claim 21:

AAPA and Weigl et al. disclose the claimed invention as to claim 20 above.

Furthermore, Weigl et al. discloses that the users of the communication system are each allocated at least one predeterminable timeslot of the timeframes (component of transmission matrix) for data transmission. (Weigl et al.; column 6, lines 1-4; transmission groups also illustrated on Fig.4).

As to claims 14, 15, 22 and 23:

AAPA and Weigl et al. disclose the claimed invention as to claims 13, 20 and 21 above.

Furthermore, Weigl et al. discloses that the message includes data about the cycle (rate of repetition (defines after how many cycles this (current) transmission is repeated)) (Weigl et al.; column 6, lines 28-42; therefore, data about the cycle pertain to the message and therefore pertain to the current cycle in which the message is sent

and include an ordinal number of the cycle (base mark indicates in which base cycle in the overall cycle the message is sent first)).

11. Claims **16-19 and 24-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicants Admitted Prior Art (page 13, [0046])** in view of **Weigl et al. US 6,842,808, as a Pre-Grant Publication US 2001/0018720**, published on August 30, 2001, of record and further in view of **Stoneking et al. US 6,606,670**, of record.

As to claims 16-19:

AAPA and Weigl et al. disclose the claimed invention as to claims 13-15 above. Furthermore, Weigl et al. discloses the message includes the time data (timing window) which include data about the chronological position of a timeslot within a timeframe (Weigl et al.; column 6, lines 28-37).

AAPA and Weigl et al. fail to teach that time data can be learned from the identifier; that cycle data are stored in memory in a message as part of the identifier of that message.

However, Stoneking et al. discloses that any convenient fields and message format may be used depending on the particular implementation contemplated (Stoneking et al.; column 5, lines 6-8). Stoneking et al. discloses that message identifier used together with other field (RTR bit) for the purpose of message arbitration. (Stoneking et al.; column 5, lines 15-28; Arbitration Field (identifier associated with other fields) (154) is shown on Fig. 2A, 2B).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to access identifier field and supplemented (timing window or (base mark and rate of repetition)) fields described by AAPA and Weigl et al. in a combination thereof described by Stoneking et al. in order to arbitrate messages (Stoneking et al.; column 5, lines 15-28).

Furthermore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to retrieve the time data from the identifier combined with the timing window field for the purpose of message arbitration (Stoneking et al.; column 5, lines 15-28).

As to claims 24-31:

AAPA and Weigl et al. disclose the claimed invention as to claims 22 and 23 above.

Furthermore, Weidl et al. discloses the current cycle data are monitored by the users (reference message received by all nodes and include number of instantaneous cycle (Weigl et al.; column 4, lines 23-30)); predeterminable value stored in a memory of the user for the cycle data (watchdog Weigl et al.; column 4, lines 44-49); a message is sent by a user in a predeterminable timeslot only if the current cycle data match a predeterminable value, stored in a memory of the user, for the cycle data (watchdog is actuated Weigl et al.; column 4, lines 61-65).

AAPA and Weidl et al. fail to teach that the messages (data traffic) are observed by the users of the communication system; that the identifiers and the cycle data of the messages are compared with predeterminable values, stored in memories of the

observing users, for the identifier and the cycle data, and at least the useful data of a transmitted message are received by the user only if the identifier and the cycle data of the message match the predeterminable values, stored in the memory of the user, for the identifier and the cycle data.

However, Stoneking et al. discloses that each message includes a message ID; In order to determine whether to process a received message, each node examines the message ID from the message; each node is configured to process messages whose message IDs meet predetermined criteria; these criteria may be, for example, that the message ID is one in a defined set, is within a certain numeric range or outside of a certain numeric range; If the extracted message ID meets the predetermined criteria, then the receiving node processes the message (Stoneking et al. column 4, lines 50-58); if a particular node receives a message with a message ID that it is not configured to process, it will not process the message. If, however, a node receives a message with a message ID that it is configured to process, the node will process the message (Stoneking et al. column 7, lines 28-38); the device 400 (Stoneking et al.; Fig 5.) may include receive buffers, at least one acceptance mask and at least one filter; the mask defines a bit pattern associated with a message ID that either should be accepted or rejected; the mask bits are applied to filters which then perform the function of accepting or rejecting an incoming message-based on whether the message ID of the message meets a predetermined criteria defined by the mask (Stoneking et al.; column 10, lines 54-62); in a message-based network, messages are transmitted to all nodes in the network; each node must then determine whether to accept and process a message or

ignore the message (Stoneking et al. column 1, lines 24-27) for the purpose of allowing coordinated control of many control nodes within the system (Stoneking et al. column 1, lines 29-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to update method of exchange of data described by AAPA and Weidl et al. such that to update nodes to process only those messages which are configured to process (meet predetermined criteria) and include an acceptance mask to the nodes described by Stoneking et al. in order to allow coordinated control of many control nodes within the system (Stoneking et al. column 1, lines 29-31).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Skripnikov whose telephone number is 571-270-1958. The examiner can normally be reached on Monday - Friday 9:00 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on 571-272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 10, 2009

/Alex Skripnikov/
Examiner, Art Unit 2416

/Kwang B. Yao/
Supervisory Patent Examiner, Art Unit 2416